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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/728,430	11/30/2000	Mehryar Khalili Garakani	2705-130	6082

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MARGER JOHNSON & MCCOLLOM, P.C.
210 SW MORRISON STREET, SUITE 400
PORTLAND, OR 97204

EXAMINER	
TSEGAYE, SABA	
ART UNIT	PAPER NUMBER
2616	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/728,430	GARAKANI ET AL.	
	Examiner	Art Unit	
	Saba Tsegaye	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 January 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *21,22 and 25-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *21, 22 and 25-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This Office Action is in response to the amendment filed 10/25/06. Claims 21, 22 and 25-34 are pending. Currently no claims are in condition for allowance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 30-34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The Specification does not adequately describe a computer readable medium including a computer program defines structural and functional interrelationships between the computer program and the rest of the computer, which allows the computer program's functionality to be realized. The original disclosure supports with **only** a brief mention that a hardware/software in which instructions are executed without any adequate and enabling disclosure.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 29 and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 29, line 1, the phrase "a store to store the end-to-end maximal compression" is confusing.

Claim 34, line 1, it is not clear whether "a means for storing" refers to the same means for storing cited in claim 33, line 11.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 30-34 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims recited "an article of computer-readable media **containing** a program..." which is not embodied in "a computer readable medium that stores a computer program..". See MPEP 2106.

Claim Rejections - 35 USC § 103

7. Claims 21, 22 and 25-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fayad et al. (US 6,757,250) in view of Mahler et al. (US 6,542,504 B1).

Regarding claim 21, Fayad discloses a method of negotiating maximal data compression of a modem relay channel, comprising:

determining a first maximal data compression on a first leg (gateway 306 can negotiate with modem 302 the selection of protocols (as known, compression is one of a common protocol type, further, see column 6, line 65-column 7, line 3);

determining second maximal data compression on a second leg (gateway 308 can negotiate with modem 304);

comparing the first maximal data compression and the second maximal data compression (gateways 306 and 308 are configured to engage into an exchange of capabilities (col. 11, lines 48-49);

selecting end-to end maximal data compression from the first and second maximal data compressions (gateways 306 and 308 are configured to engage into an exchange of capabilities and agree on the selection of protocols to be used with both modems 302 and 304 (col. 11, lines 48-51));

renegotiating only an unselected one of the first an second maximal data compressions (column 8, line 54-column 9, line 2, column 13, lines 45-53; furthermore, it is inherent to renegotiating only an unselected protocol or rate in data communication system); and

transmitting data using the end-to-end maximal data compression (information frames can be suitably passed from modem 302 to modem 304) (column 6, line 52-column 7, line 20; column 9, lines 35-50; column 11, lines 31-46) .

Further, Fayad discloses that both modem 302 and gateways support data compression in a data link protocol, such as V.42. As known, renegotiation is not allowed by V.42bis specification.

However, Fayad does not expressly disclose saving the end-to-end maximal data compression in memory.

Mahler teaches means for storing negotiated profiles and compression options (column 6, lines 5-9)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings for Mahler of saving the end-to end maximal data compression in the apparatus of Fayad in order to provide an efficient transmission system.

Regarding claim 22, Fayad discloses the method further comprising delaying negotiations on the second leg until a maximal data compression on the first leg has been determined (column 9, lines 46-50).

Regarding claim 25, Fayad discloses the method determining a maximal data compression on a first leg further comprising determining a maximal data compression on a called leg (gateway 306 negotiates with modem 302 the selection of protocols), determining a maximal data compression on a second leg further comprising determining a maximal data compression on a calling leg (gateway 308 can negotiate with modem 304).

Regarding claim 26, Fayad discloses the method further comprising delaying negotiations on the calling leg until notification is received from the called leg (column 11 lines 31-37).

Regarding claim 27, Fayad discloses the method determining a maximal data compression on a first leg further comprising negotiating a maximal data compression on a

calling leg and determining a maximal data compression on a second leg further comprising determining a maximal data compression on a called leg (column 11 lines 31-46).

Regarding claims 28 and 29, Fayad discloses, in figs. 3, 4 and 6, a network device, comprising:

a connector (306) to allow the device (302) to connect to a network (314) and receive a signal from a remote gateway (308) of maximal data compression on a remote leg (gateway 308 can negotiate with modem 304);

a dual first-pass negotiation mechanism to negotiate a first and a second maximal data compression capability for each of a first and second leg (gateway 306 can negotiate with modem 302 the selection of protocols and gateway 308 can negotiate with modem 304);

an end-to end compression capability determination mechanism to select and end-to-end maximal data compression capability from the first and second maximal data compression capabilities (gateways 306 and 308 are configured to engage into an exchange of capabilities and agree on the selection of protocols to be used with both modems 302 and 304 (col. 11, lines 48-51)); and

a second pass end-to-end renegotiation mechanism to renegotiate only one or more of the first or second maximal data compression to conform to the end-to-end maximal data compression capability (column 8, line 54-column 9, line 2; column 13, lines 45-53).

Further, Fayad discloses that both modem 302 and gateways support data compression in a data link protocol, such as V.42. As known, renegotiation is not allowed by V.42bis specification.

However, Fayad does not expressly disclose saving the end-to-end maximal data compression in memory.

Mahler teaches means for storing negotiated profiles and compression options (column 6, lines 5-9)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings for Mahler of saving the end-to end maximal data compression in the apparatus of Fayad in order to provide an efficient transmission system.

Regarding claim 30, Fayad discloses an article of computer-readable media containing a program (column 3, lines 18-28) that, when executed causes a computer to:

determine first maximal data compression on a first leg (gateway modem 306 receives a local call from modem 302; data link protocols such a V.42 and the like are suitably provided between modem 302 and gateway 306 , further, see column 6, line65-column 7, line 3);

determine second maximal data compression on a second leg (gateway 308 can negotiate with modem 304);

compare the first maximal data compression and the second maximal data compression (gateways 306 and 308 are configured to engage into an exchange of capabilities (col. 11, lines 48-49);

select end-to end maximal data compression from the first and second maximal data compressions (gateways 306 and 308 are configured to engage into an exchange of capabilities and agree on the selection of protocols to be used with both modems 302 and 304 (col. 11, lines 48-51));

renegotiate only an unselected one of the first an second maximal data compressions (column 8, line 54-column 9, line 2; column 13, lines 45-53); and

transmitting data using the end-to-end maximal data compression (information frames can be suitably passed from modem 302 to modem 304) (column 6, line 52-column 7, line 20; column 9, lines 35-50; column 11, lines 31-46) .

Further, Fayad discloses that both modem 302 and gateways support data compression in a data link protocol, such as V.42. As known, renegotiation is not allowed by V.42bis specification.

However, Fayad does not expressly disclose saving the end-to-end maximal data compression in memory.

Mahler teaches means for storing negotiated profiles and compression options (column 6, lines 5-9)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings for Mahler of saving the end-to end maximal data compression in the apparatus of Fayad in order to provide an efficient transmission system.

Regarding claim 31, Fayad discloses the program further inherently comprising storing the end-to-end maximal compression parameters (negotiation posture) in memory (column 11, lines 31-3).

Regarding claim 32, Fayad discloses the program further inherently comprising using the end-to-end maximal compression parameters stored in memory to prevent renegotiation by either the first leg or the second leg (column 11, lines 31-3).

Regarding claims 33 and 34, Fayad discloses, in figs. 3, 4 and 6, a network device, comprising:

a means for allowing the device to connect to a network (a communication with a second modem 304 through gateway 306; see fig. 3) and receive a signal from a remote gateway (308) of maximal data compression on remote leg (modem 304 negotiates with gateway 308 and gateways 306 and 308 are configured to engage into an exchange of capabilities of both modems 302 and 304);

a means for delaying data compression negotiations until the signal is received (column 11, lines 31-37);

a means for negotiating a first and second maximal data compression capability for each of a first and second leg (gateway 306 can negotiate with modem 302 the selection of protocols and gateway 308 can negotiate with modem 304);

a means for selecting an end-to-end maximal data compression capability from the first and second maximal data compression capabilities (gateways 306 and 308 are configured to engage into an exchange of capabilities and agree on the selection of protocols to be used with both modems 302 and 304 (col. 11, lines 48-51)); and

a means for renegotiating only an unselected one of the first or second maximal data compression based upon the enc-to-end maximal data compression capability (column 8, line 54-column 9, line 2; column 13, lines 45-53); and

a means for signaling the remote gateway that negotiations are complete (column 8, line 1).

Further, Fayad discloses that both modem 302 and gateways support data compression in a data link protocol, such as V.42. As known, renegotiation is not allowed by V.42bis specification.

However, Fayad does not expressly disclose saving the end-to-end maximal data compression in memory.

Mahler teaches means for storing negotiated profiles and compression options (column 6, lines 5-9)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings for Mahler of saving the end-to end maximal data compression in the apparatus of Fayad in order to provide an efficient transmission system.

Response to Arguments

8. Applicant's arguments with respect to claims 21, 22 and 25-34 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saba Tsegaye whose telephone number is (571) 272-3091. The examiner can normally be reached on Monday-Friday (7:30-5:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on (571) 272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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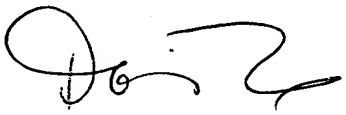
February 26, 2007



DORIS H. TO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600